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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,230	01/22/2004	Masami Shirai	P24705	2038

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GREENBLUM & BERNSTEIN, P.L.C.
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RESTON, VA 20191

EXAMINER

NGUYEN, SANG H

ART UNIT	PAPER NUMBER
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2886

NOTIFICATION DATE	DELIVERY MODE
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06/04/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/761,230

Applicant(s)

SHIRAI ET AL.

Examiner

Sang Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-14, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,628,803 in view of Arbisi (U.S. Patent No. 5,826, 851).

Regarding claim 1; the features of claim 1 of U.S. Patent No. 6,628,803 discloses the target having a first bar and a second bar that are connected to each other and configured to be photographed with an object to provide a photogrammetric analytic measurement and at least three standard point members that are fixed the first bar

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and said second bar, said at least three standard point members lying on one plane (claim 1 lines 1-10 or col.19 lines 58-67). Claim 1 of U.S. Patent No. 6,628,803 discloses all of features of claimed invention except for non-reflecting members that are respectively attachable to and removable from said at least three standard point members. However, Arbisi teaches that it is known in the art to provide non-reflecting members that are respectively attachable to and removable from said at least three standard point members (col.1 line 45 to col.2 lines 45; and figures 1-9) It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the target of claim 1 of U.S. Patent No. 6,628,803 with non-reflecting members that are respectively attachable to and removable from said at least three standard point members as taught by Arbisi for the purpose of easily moving and holding objects due to the potentially destructive natural of such adhesive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

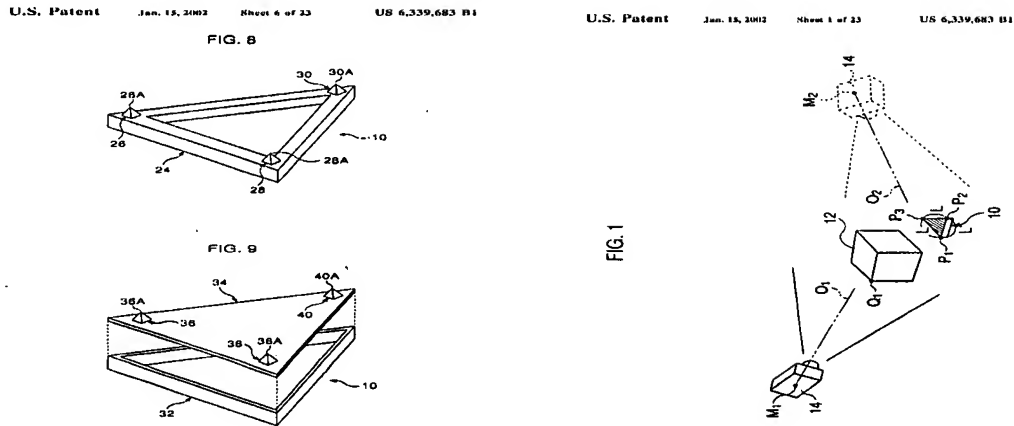
Claims 1, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al (U.S. Patent No. 6,108,497) in view of Ota et al (U.S. Patent No. 5,257,998).

Regarding claim 1; Nakayama et al discloses a target for photogrammetric analytic measurement, said target comprising:

the target (10 of figures 1 and 9) having a first bar considered to be a first equilateral-triangle frame (32 of figure 9) and a second bar considered to be a second equilateral-triangle (34 of figure 9) that are connected to each other (figures 8-9) and configured to be photographed with an object (12 of figure 1) to provide a photogrammetric analytic measurement (14 of figure 1);

at least three standard point members (36A, 38A, 40A of figure 9) that are fixed on a first equilateral-triangle frame (32 of figure 9) and a second equilateral-triangle (34 of figure 9) considered to be the first bar and said second bar, said at least three standard point members (36A, 38A, 40A of figure 9) lying on one plane (figures 8-9).

See figures 1-41.



Nakayama et al discloses all of features of claimed invention except for non-reflecting members that are respectively attachable to and removable from said at least three standard point members. However, Ota et al teaches that it is known in the art to provide the target (2 of figure 2) having two bars (15, 17 of figure 2) and at least three standard point members (14,16, 20 of figure 2) that are fixed each other and non-reflecting members (C4, C5, H5,H6 of figure 2) that are respectively attachable to and removable from said at least three standard point members (col.4 lines 10-62). See figures 1-8.

Therefore, it would have been obvious to one having ordinary skill in the art the time the invention was made to combine target of Nakayama et al with non-reflecting members that are respectively attachable to and removable from said at least three standard point members as taught by Ota et al for the purpose of reproducing accuracy three dimensional data representing the position of the focus in the patient's head.

Regarding claim 16; Nakayama et al fail to disclose a ferromagnet material and a magnetic material. It would have been obvious to one having ordinary skill in the art at

the time the invention was made to combine target of Nakayama et al with a ferromagnet material and a magnetic material, since it has been held to be within the general skill of a worker in the art to select a know material on the basis of its suitability for intended use as a matter of obvious design choice.

Regarding claim 18; Nakayama et al discloses the first and second bars considered to be a first equilateral-triangle frame (32 of figure 9) and a second equilateral-triangle (34 of figure 9) are configured to be positionable in an operative orientation and in an inoperative orientation, the first and second bars considered to be a first equilateral-triangle frame (32 of figure 9) and a second equilateral-triangle (34 of figure 9) being fixedly positioned with respect to each other in the operative orientation. Figures 1 and 8-9

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al and Ota et al as applied to claim 1 above, and further in view of Kaneko (U.S. Patent No. 6,144,761 submitted by applicant).

Regarding claim 17, Nakayama et al discloses all of features of claimed invention except for at least one angle sensor and a transmitter configured to wireless transmit data output by the at least one angle sensor to receiver. However, Kaneko teaches that it is known in the art to provide photogrammetric analytic measurement having a camera body (10 of figure 1) provides at least one angle sensor (66, 68 of figure 2) and a transmitter configured to wireless transmit data output by the at least one angle sensor (66, 68 of figure 2) to receiver (figure 2). It would have been obvious to one having ordinary skill in the art the time the invention was made, to combine target of

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Nakayama et al with at least one angle sensor and a transmitter configured to wireless transmit data output by the at least one angle sensor to receiver as taught by Kaneko for the purpose of measuring accuracy angle data with respect to a direction defined by terrestrial magnetism.

Allowable Subject Matter

Claims 2-14 and 19-20 are allowed.

The prior art of record, taken alone or in combination, fails discloses or render obvious a target comprising all the specific elements with the specific combination including of said at least three standard point members respectively comprise a circular portion, a diameter of which substantially equals a width of said first bar and said second bar in set forth limitation of claim 2.

The prior art of record, taken alone or in combination, fails discloses or render obvious a target comprising all the specific elements with the specific combination including of one end of said first bar is rotatably connected to one end of said second bar, wherein when said target is in an operational position, said first bar and said second bar are fixed such that said first bar and said second bar are perpendicular to each other and when said target is not in the operational position, said first bar and said second bar are fixed such that said first bar and said second bar are substantially parallel to each other in set forth limitation of claim 11.

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, taken alone or in combination, fails discloses or render obvious a target comprising all the specific elements with the specific combination including of one end of said first bar is rotatably connected to one end of said second bar, wherein when said target is in an operational position, said first bar and said second bar are fixed with respect to each other such that said first bar and said second bar define a predetermined angle with respect to each other; and when said target is not in the operational position, said first bar and said second bar are fixed to each other such that said first bar and said second bar define another predetermined angle with respect to each other in set forth limitation of claim 15.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifu Chowdhury can be reached on (571) 272-2800 ext. 86. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 25, 2007



Sang Nguyen
Primary Patent Examiner
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